



# Do you mark equipment and paint signs?

## Would you like to improve this process in the following areas?

- **Meet environmental compliance regulations.** Reduce hazardous waste disposal and air emissions. Media areas include air and hazardous waste programs.
- **Improve workers' safety and health.** Eliminate worker exposure to harmful paint-related VOCs and solvents.
- **Increase productivity.** Reduce labor hours required for stenciling and sign marking.
- **Save money.** Reduce hazardous waste disposal costs.



*Improved Stenciling and Marking System*

*Stenciling and marking operations generally involve time, labor and the use of hazardous materials such as paint, aerosol spray cans, tape, rags and cleaning solvents. Stencils have to be drawn and cut. Words and letters are measured, centered and then cut, either by hand or stamped out. Then the stencil must be fastened to a surface and painted over, either by brush or aerosol spray can. Clean-up uses solvents or other hazardous materials. The Improved Stenciling and Marking System requires none of those materials. It provides durable stencils and signs via a computer-driven graphics output device that prints and cuts vinyl and film material to marking operation specifications, up to 12-inches wide. Most desktop computers with the necessary capabilities, can run the software. **This equipment is available through the Navy Pollution Prevention Equipment Program.***

## How can you achieve these improvements?

Use the Improved Stenciling and Marking System.

## How does this equipment work?

Instead of using paint, paint brushes, and aerosol paint cans, a graphics output device is used to print and cut vinyl and film to stencil or sign specifications.

## How will this equipment save you money?

It reduces the need for hazardous materials and reduces any associated hazardous waste disposal costs. The cost is approximately \$11,000, including computer equipment.



## Typical Process Flow Diagram



### How can this technology eliminate or reduce pollution?

This technology can eliminate worker exposure to harmful paints and solvents. Use will also result in the following pollution reductions:

- Reduction in use and disposal of solvents.
- Reduction of air emissions related to solvent use.
- Reduction in material sent to landfills.

### Which shops can benefit most from this technology?

This technology can be used in processes that require stenciling and sign painting. Shops that could benefit include:

- Aircraft painting
- Support equipment painting
- Automotive painting
- Facilities painting

### How can this technology reduce regulatory compliance concerns?

This technology reduces the amount of paints and cleaning solvents used for stenciling and marking, thereby reducing VOC emissions and waste generation. Use will result in the following regulatory compliance benefits:

- Reduction in hazardous waste helps facilities meet the waste minimization requirement under RCRA, 40 CFR 262.41 (a)(6)
- May help facilities reduce their generator status and lessen the tasks required to comply under RCRA, 40 CFR 262 (i.e. record keeping, reporting, inspections, transportation, accumulation time and emergency measures).
- May help reduce facility-wide air emissions below applicable major source threshold. (Facilities that are not a major source for any pollutant do not need a Title V permit.)

### Achieving Environmental Compliance Through Pollution Prevention

Every day the Navy faces the challenge of operating and maintaining the fleet while complying with environmental regulations. This burden can be reduced by using pollution prevention technologies and methods to reduce compliance requirements. This fact sheet is one in a series designed to encourage activities to use pollution prevention technologies and methods. The overall goal of this series is to promote sustained environmental compliance at the lowest life-cycle cost.

### For additional information, contact:

PPEP Equipment Book (<http://www.lakehurst.navy.mil/p2/index.htm>).

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